

527, 970

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



14 MAR 2005



(43) International Publication Date  
25 March 2004 (25.03.2004)

PCT

(10) International Publication Number  
**WO 2004/024638 A1**

- (51) International Patent Classification<sup>7</sup>: **C02F 3/12**, 3/26, 3/30
- (21) International Application Number: PCT/NL2003/000642
- (22) International Filing Date: 16 September 2003 (16.09.2003)
- (25) Filing Language: Dutch
- (26) Publication Language: English
- (30) Priority Data: 1021466 16 September 2002 (16.09.2002) NL
- (74) Agents: **ALTENBURG, Bernardus, Stephanus, Franciscus et al.**; Octrooibureau Los En Stigter B.V., Weteringschans 96, NL-1017 XS Amsterdam (NL).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicants (*for all designated States except US*): **TECHNISCHE UNIVERSITEIT DELFT** [NL/NL]; Julianalaan 134, NL-2628 BL Delft (NL). **STICHTING VOOR DE TECHNISCHE WETENSCHAPPEN** [NL/NL]; Van Vollenhovenlaan 661, NL-3527 JP Utrecht (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **VAN LOOS-DRECHT, Marinus, Cornelis, Maria** [NL/NL]; Viool 99, NL-2678 HL De Lier (NL). **DE KREUK, Merle, Krista** [NL/NL]; Bothastraat 2, NL-2806 EM Gouda (NL).
- Published:**
- with international search report
  - before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: METHOD FOR THE TREATMENT OF WASTE WATER WITH SLUDGE GRANULES

(57) **Abstract:** The invention relates to a method for the treatment of waste water comprising an organic nutrient. According to the invention, the waste water is in a first step fed to sludge granules, after the supply of the waste water to be treated the sludge granules are fluidised in the presence of an oxygen-comprising gas, and in a third step, the sludge granules are allowed to settle in a settling step. This makes it possible to effectively remove not only organic nutrients but optionally also nitrogen compounds and phosphate.



WO 2004/024638 A1